

PROCEEDINGS
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NEW SPECIES OF COLEOPTERA (FAM. CLERIDAE)
FROM THE PHILIPPINE AND NEIGHBORING
REGIONS, COLLECTED BY PROF.
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The new species of Cleridae herein described form part of a collection made by Professor Charles Fuller Baker, of the College of Agriculture, University of the Philippines, Los Baños, P. I., on different islands of the Philippine archipelago and Borneo. The collection is exceptionally rich in species of the genera *Callimerus* and *Tenerus*. All of the forms characterized in this paper are referable to the tribe *Tillini*. The types are all in the author's collection.

1. *Tillus mindanensis*, n. sp.

Form and size of *T. notatus* Klug. Black, elytra with a central longitudinal brownish plagia and a transverse ivory spot on either side. Head black, punctuation very fine, almost invisible, antennae eleven segmented, strongly serrated, the three basal segments piceous. Mouthparts, except for the mandibles which are black, piceous. Thorax barrelshaped, strongly constricted behind, shining, punctures fine and sparse. Scutellum densely pubescent with white hairs. Elytra with coarse punctures in rows on the basal half, finely and irregularly punctured toward the apex. Near the scutellum, between the first and second rows of punctures there is a deep longitudinal pit, as long as two spaces between punctures. The elytra are black except for the central brown portion bounded as follows: at the base by the fourth row of punctures, thence toward the apex to about basal fourth where it is suddenly narrowed to the second row. At about the middle it suddenly widens in a triangular lateral expansion, reaching the lateral transverse ivory spot. This spot commences at the fifth row of punctures and reaches the lateral margin. The brown plagia disappears

soon after the white spot and is resumed in the form of a subapical spot, common to the two elytra. The surface bears a few upright black spine-like hairs and toward the apex is rather densely covered with pale silky pubescence. Under parts black, shining, sparsely and finely punctured. The side pieces of the metasternum are densely clothed with white silvery pubescence, as also are the lateral portions of the abdominal segments. Legs black, except for the apical halves of the tibiae and the whole of the tarsi, which are rufopiceous. Length: 5.5 mm.

Type: A female from Davao, Mindanao, P. I., C. F. Baker (Baker No. 4268).

2. *Tillus nitidicollis*, n. sp.

Similar in form and general appearance to *T. mindanensis*, but larger. Head slightly coarser and more densely punctured, epistoma with fine transverse wrinkles. Antennal segments broadly triangular, the outer angles rounded. Thorax more densely and coarsely punctured and with a very distinct subapical transverse impression. The elytra are colored quite similarly to those of the preceding species but the brown is of less extent anteriorly and much greater posteriorly. The ivory spot in this species turns sharply at its sutural end, and, filling the fifth interval completely, runs forward to the basal third. The basal portion of each elytron is gibbous and in place of the longitudinal pit, there is a dull, raised portion of somewhat greater extent. The stiff spine-like hairs are confined to the basal part and the entire surface is covered with very short fine hairs, whose color is the same as that of the portion of the elytron from whence they arise. The under parts are more roughly sculptured, especially the meta-thorax. The legs are similar in coloration to those of *T. mindanensis*. Length: 8 mm.

Type: A male from Sandakan, North Borneo, C. F. Baker (Baker No. 11,496).

Melanoclerus, n. gen.

Form robust, eyes moderately coarsely granulated and quite prominent. Antennae eleven segmented, very short, hardly longer than the distance between the eyes, segments nine to eleven forming a compact club, the last segment the longest. Last segment of the maxillary palpi cylindrical, somewhat acuminate, that of the labial palpi large, subtriangular, the outer side broadly rounded. Thorax barrelshaped, somewhat constricted behind. Elytra covering the abdomen, sutures closed, punctured in rows, the punctures disappearing before basal half. Abdomen with six visible ventral segments. Tarsi with five segments, all visible from above, the first four short, second, third and fourth with lamellae beneath. Claws bifurcate, the inner portion nearly as long as the outer.

Genotype: *Melanoclerus parvus*, n. sp.

This genus should be placed near *Gastrocentrum* Gorham 1876, judging from the structure of the under parts and of the claws.

3. *Melanoclerus parvus*, n. sp.

Form parallel, robust; head small; with eyes, not wider than the prothorax; black. Head finely and sparsely punctured, frons slightly impressed either side of the median line, sparsely pubescent. Antennae very short, the segments densely and finely punctured, ninth strongly transverse, tenth equal in width to ninth but somewhat longer, eleventh cultriform, as wide as the tenth and as long as the ninth and tenth together. Mouth-parts very dark piceous. Thorax longer than wide, finely margined at base, very densely and finely punctured, pubescence short and dense, with some longer hairs intermingled. Scutellum small, rounded behind. Elytra with rows of coarse punctures at base, punctures becoming obsolete just before middle. Apical half of the elytra densely and finely punctured. Pubescence short, depressed and gray, with longer erect black hairs. Under parts densely punctured and sparsely pubescent. Legs short, posterior femora not reaching posterior border of second abdominal segment, dark piceous, slightly paler at joints. Length: 4.5 mm.

Type: A female from Sandakan, North Borneo, C. F. Baker.

4. *Callimerus princeps*, n. sp.

Elongate, parallel, black; legs, antennae and mouth parts pale, more or less covered with glossy white scales. Head finely and very minutely punctured, entirely covered with scales except for the vertex and a narrow line running down onto the frons. Thorax longer than wide, dilated at the middle, broadly and shallowly impressed at the apex, narrowly and more deeply at the base. A triangular median spot, and the lateral portions are free from scales. Elytra parallel, black, deeply and coarsely punctured except along the suture at the median third of the length. Surface of the elytra between the punctures dull, alutaceous. There are seven denuded areas, one subbasal on each elytron, one median lateral on each elytron and one median central, common to the two elytra, and one subapical on each. The apices of the elytra are internally obliquely truncate, the outer angle only, mucronate. Under parts black, laterally densely covered with white scales. Legs pale testaceous, the femora showing traces of green pigment. Posterior tibiae with subapical notch. The entire surface of the beetle has, in addition to the scales, a vestiture of long, erect hairs, rather sparsely placed. Length: 7 mm.

Male.—Terminal dorsal abdominal segment dilated and bifurcate. Each ramus extends outward and downward, becoming gradually widened to the tip, which is sharply truncate. The tips of the rami are turned under toward the median line. Between the rami there is a small triangular projection.

Female.—Unknown.

Type.—A male from Basilan, P. I., C. F. Baker (Baker No. 11,534).

5. *Callimerus intricatus*, n. sp.

Elongate, parallel, slender. Bluish; antennae, mouth parts and legs testaceous; vestiture of white scales unevenly distributed over the body.

Head minutely and very sparsely punctured, vertex sparsely, rest of head densely covered with white scales. Thorax hardly dilated at sides, each side with a round deep pit as in the species of the genus *Hydnocera* Newm. Apical transverse impression hardly distinct, basal well defined. Surface shining with a few deep conspicuous punctures on the denuded areas. A central rectangular discal spot and a smaller lateral roundish spot on each side are devoid of scales. Elytra parallel, narrow, shining, coarsely and sparsely punctured, punctures irregularly placed. The pattern of white scales is in lines and consists of a basal transverse band with a posterior prolongation over each humerus, and a sutural stripe which widens as it proceeds apically and which bifurcates at about basal fourth, each ramus reaching the lateral margin. Commencing just cephalad of each ramus and crossing it are two short longitudinal stripes, each placed midway between the suture and the lateral margin and extending caudad to about the middle of the total length of the elytron, then striking backward and inward suddenly to the suture. At the apical third there is a transverse band and from this the suture is scaly to the apex. The sutural stripe widens rapidly so that the entire apices are covered with scales. Apices internally obliquely truncate, the outer angle very slightly mucronate. The under parts are blackish blue laterally covered with scales. Legs testaceous, hind tibiae with subapical notch. Length: 6.5 mm.

Male.—Unknown.

Female.—Terminal segments simple, unmodified.

Type.—A female from Sandakan, North Borneo; C. F. Baker.

6. *Callimerus bornensis*, n. sp.

Similar in size and form to the preceding. Black, legs and antennae pale testaceous, mouth parts piceous, body more or less covered with white scales. Head apparently impunctate, sparsely and evenly covered with scales, these scales a little more densely placed toward the eyes. Thorax hardly dilated, distinctly flattened above, very coarsely and moderately closely punctured, without lateral pits. Apical transverse impression very slight, basal sharply defined, distinct. A transverse, rather broad undulating band is free of scales. Elytra strongly and coarsely punctured, the intervals between the punctures dull, alutaceous. The white scales are distributed as follows: a transverse narrow basal band, an undulating band in the form of a W, in which the three upper points of the design are at the humeri and the scutellum and the two lower are at about basal third, midway between the suture and the lateral margin. Next on each elytron is a semicircle with the convexity toward the suture, these occupying about the third quarter of the length. The apices are scaly, and are internally obliquely truncate, the outer angle mucronate. Under parts as in the preceding species. Legs testaceous, posterior knees slightly darker. Posterior tibiae with subapical notch.

Length: 7.5 mm.

Male.—Unknown.

Female.—Terminal segments simple, unmodified.

Type.—A female from Sandakan, North Borneo, C. F. Baker.

7. *Callimerus hexagonus*, n. sp.

Elongate, parallel; blue, antennae, mouth parts and legs pale testaceous. Head conspicuously punctured, frons with transverse wrinkles, sparsely covered with white scales. Thorax conspicuously dilated at the sides with a prominent though shallow pit on either side at the widest part, anterior constriction shallow, posterior deeper and more definitely indicated. Sides at base and apex covered with white scales, the entire surface with rather coarse, sparse punctures. Scutellum densely scaly. Elytra long, parallel, with very coarse punctures not arranged in rows, finely alutaceous between the punctures. There is a hexagon of white scales common to the two elytra, extending from just behind the scutellum to about the middle of the length. At each angle of the design, except the posterior one, the scales are extended in lines toward the nearest margin, the line from the sutural anterior angle reaching the scutellum. Behind the hexagon, from the suture obliquely in a posterior direction, nearly to the side margin, is a white mark on each elytron and there is a subapical spot or line on each. The tips of the elytra are internally obliquely truncate, both angles of the truncature mucronate. Under parts very finely punctured, the lateral portions of the thorax and abdomen covered with white scales. Legs testaceous, the inner margins of the femora and the outer margins of the tibiae infuscate. The tarsi are also darker. Posterior tibiae with subapical notch.

Length: 11 mm.

Male.—Unknown.

Female.—Terminal abdominal segments simple, unmodified.

Type.—A female from Penang, Straits Settlements, C. F. Baker.

8. *Callimerus oculatus*, n. sp.

Elongate, testaceous, tips of the elytra and flanks near the humeri darker, scales white, sparse, evenly distributed on the elytra except near tips. Head sparsely and finely punctured, white scales along the margins of the eyes, which are black and conspicuous. Thorax almost impunctate, testaceous with a trace of green pigment in places, constricted before and behind, lateral depression faint, with a few white scales low down on the sides. Elytra long, slightly narrowed posteriorly, punctures moderate in size and tending to form rows, lateral margins toward the humeri and apices dark, uniformly covered with whitish scales except for the anterior half of the apical dark spot. Lateral portions of the under parts densely clothed with white scales, median under parts finely and sparsely punctured. Legs pale testaceous, with a greenish tinge, especially noticeable on the femora. Posterior tibiae with subapical notch.

Length: 7 mm.

Male.—Unknown.

Female.—Terminal segments of abdomen simple, unmodified.

Type.—A female from Sandakan, North Borneo, C. F. Baker.

9. *Callimerus luzonicus*, n. sp.

Elongate, head and thorax dark testaceous, the latter usually distinctly greenish, elytra varying from piceous to rufotestaceous. Head shining, almost impunctate, with a few white scales near the eyes. Thorax not strongly dilated but with distinct anterior and posterior constrictions. Lateral depressions distinct, circular. Entire surface devoid of scales, though distinctly pubescent. Elytra long, parallel, piceous with the extreme base rufous to rufotestaceous with the lateral margins and tips piceous, evenly covered with white scales. Punctures moderate in size, distinctly in rows, the rows spaced more or less evenly from the suture to the side margin. Tips internally obliquely truncate, the outer angle with mucro, the inner broadly rounded. Under parts as usual with the lateral parts densely scaly. Legs pale with greenish tinge. Posterior tibiae with subapical notch.

Length: 7-8.5 mm.

Male.—Terminal dorsal abdominal very broad and deeply cut out so that the lateral horns are quite slender. These horns are bent under and are widened into hooked chisel-like blades. The center portion of the segment is slightly produced and broadly rounded.

Female.—Terminal segments simple, unmodified.

Type.—A male from Mt. Makiling, Luzon, P. I., C. F. Baker (Baker No. 11,546). Paratypes: males and females, Mt. Makiling, C. F. Baker (Baker Nos. 1655, 1656, 11,546).

10. *Callimerus fuscitarsus*, n. sp.

Elongate, slightly tapering behind. Dark testaceous, side margins of the thorax and flanks of the elytra with the tips dark. Head finely, almost invisibly punctured; smooth and shining, with a few whitish scales near the eyes. Thorax slightly dilated at sides, anterior and posterior constrictions distinct, lateral depressions round and shallow. Low down on the sides there are a few scales. Surface shining, almost impunctate. Elytra with punctures in rows, surface more or less densely covered with scales, with longer hairs intermingled. Tips of the elytra truncate, the truncature hardly oblique, the outer angles with mucro. Under parts shining, very sparsely punctured, lateral portions of thorax and abdomen densely covered with scales. Legs pale, femora with greenish tinge, posterior tarsi and tips of tibiae dark fuscous. Posterior tibiae with subapical notch.

Length: 6-7.5 mm.

Male.—Terminal dorsal abdominal segment broad and bilobed, the lobes semicircular.

Female.—Terminal segments simple, unmodified.

Type.—A male from Singapore, Federated Malay States, C. F. Baker (Baker No. 11,540). Paratypes: A male from Penang and two females from Singapore (Baker No. 11,535).

11. *Callimerus lateralis*, n. sp.

Similar in form and appearance to *C. luzonicus*. Head smooth, shining, sparsely and moderately finely punctured. Thorax somewhat dilated, an-

terior and posterior depressions distinct. Punctuation moderately coarse and sparse, the entire thorax free from scales. In the type the thorax is deeply suffused with green, traces of which appear in some of the other specimens. The elytra are long and are narrowed toward the tips. The punctures are in rows, and the fourth, fifth and sixth rows are close together, taking up space equal to the interval between the first and second. The surface is quite densely and evenly covered with yellowish white scales except for the interval between the fourth and sixth rows of punctures. The tips of the elytra are truncate, slightly obliquely, neither angle with macro. The under parts are shining and finely punctured, densely clothed with scales along the sides. Legs pale, femora quite greenish. Posterior tibiae with subapical notch.

Length: 6–8 mm.

Male.—Terminal dorsal abdominal segment is broad and trifurcate, the three prolongations are acutely triangular and nearly of even length.

Female.—Terminal segments simple, unmodified.

Type.—A male from Basilan, P. I., C. F. Baker (Baker No. 11,530). Paratypes: A female from Basilan (same data as type); two males from Zamboanga, Mindanao (Baker No. 7279); a male from Dapitan, Mindanao (Baker No. 11,547); a female from Iligan, Mindanao (Baker No. 6077); and a female from Davao, Mindanao.

12. *Callimerus basilanicus*, n. sp.

Similar in size and form to *C. lateralis*. Head shining, finely and sparsely punctured, the epistoma, frons and region about the eyes thickly covered with white scales. Thorax greenish, dilated at the sides, anterior construction shallow, posterior deep, well defined. Lateral depressions round, shallow but prominent. Surface with a few fine punctures and in the vicinity of the lateral depressions with fine wrinkles. Along the sides of the disk there are a few white scales. Elytra black, punctures definitely in rows as in *C. lateralis*, well covered with scales except for the following: on each elytron near the base a rectangular patch which is continued as a fine line along the second row of punctures; the suture; the intervals between the fourth, fifth and sixth rows almost to the apex where there is a second patch; the interval between the seventh and eighth rows is also clear of scales and this stripe joins the preceding at the humerus and at the apical rectangular patch. The apices are hardly truncate, but there is a macro at the middle of each apical margin. Under parts as in the preceding species. Legs pale, femora greenish. Posterior tibiae with subapical notch.

Length: 6.5 mm.

Male.—Terminal dorsal abdominal segment very broad, very broadly and shallowly emarginate, the lateral portions revolute. There is a slight trace of a third ramus in the form of a minute triangular projection at the middle of the emargination.

Female.—Unknown.

Type.—A male from Basilan, P. I., C. F. Baker (Baker No. 11,529).

13. *Callimerus albescens*, n. sp.

Elongate, parallel, black, almost evenly but sparsely covered with scales. Legs paler. Head black, without visible punctures, evenly and sparsely clothed with scales, these slightly more dense near the eyes. Mouth parts and antennae pale testaceous. Thorax with sides slightly dilated, with a depression just before the middle of the base, apical transverse constriction obsolete, sides with lateral depressions. Surface evenly and sparsely scaly. Elytra parallel, closed, narrowed toward tips, coarsely punctured and strongly alutaceous, almost reticulate; sparsely clothed with scales except for the humeri and a median and subapical spot on each. Tips internally obliquely truncate, neither angle mucronate. Under parts of thorax black, finely punctured, the lateral portions densely scaly. Abdomen pale brown, with dense covering of scales along sides. Legs brownish testaceous, posterior tibiae with hardly a trace of subapical notch.

Length: 8 mm.

Male.—Unknown.

Female.—Terminal abdominal segments simple, unmodified

Type.—A female from Zamboanga, Mindanao, P. I., C. F. Baker (Baker No. 6696).

14. *Callimerus fenestratus*, n. sp.

Elongate, parallel, blue, decorated with lines of white scales, antennae and legs pale. Head sparsely and distinctly punctured, except for a smooth space on the vertex. The frons and epistoma are densely clothed with white scales. The thorax is hardly dilated at the sides, the anterior constriction is very feeble, the posterior more sharply defined, submarginal. The sides of the front are densely covered with scales as is the entire base. The nude part behind the anterior constriction is very coarsely and sparsely punctured and is shiny between the punctures. In front of the anterior constriction the surface is transversely wrinkled and is minutely punctured. The elytra are parallel almost to the tip where they are suddenly narrowed. Punctuation very coarse, moderately dense. Surface between the punctures alutaceous. Color blue with white scales as follows: four transverse bands, one basal, a second at basal fourth, the third at apical two-fifths and the last subapical. These bands are connected, one to another, by longitudinal stripes. the first to the second by the suture, the second to the third by two, one on each elytron about halfway between suture and margin, and the third to the fourth by the suture. The sutural angles in all cases are rounded. Tips remotely subtruncate, without mucro. Under parts very dark piceous, laterally with scales. Legs pale testaceous, each tibia with a darker stripe. Posterior tibiae without subapical notch.

Length: 6.5 mm.

Male.—Terminal dorsal segment simple, rounded, not perceptibly widened, very slightly emarginate at tip.

Female.—Unknown.

Type.—A male from Puerto Princesa, Palawan, P. I., C. F. Baker (Baker No. 4272).

15. *Callimerus arcufer* n. sp.

Elongate, parallel, blue, marked with lines and patches of white scales. Head finely and quite densely punctured, rather different from the usual condition as found in this genus. Antennae short, reaching to the posterior border of the eyes, dark testaceous. Mouth parts piceous. Surface of head very sparsely clothed with scales. Thorax hardly dilated, anterior and posterior constrictions feeble, punctuation moderately coarse and quite sparse. There are four patches of scales, one on either side of the median line at both the anterior and posterior constrictions. Elytra coarsely and moderately densely punctured, the punctures not in rows. On the second quarter of the length there is a U of white scales common to the elytra. The upper ends of the figure are connected with the side margins by lines of scales. Just back of the U there is a transverse bar of scales and a second bar, somewhat wider than the first is placed subapically. The under parts are finely and sparsely punctured, the lateral portions scaly. The anterior and middle femora are pale except for a lateral dark line, the posterior femora are pale on basal half. The rest of the legs is dark. Posterior tibiae without subapical notch.

Length: 6 mm.

Male.—Unknown.

Female.—Terminal segments simple, unmodified.

Type.—A female from Penang, Federated Malay States, C. F. Baker.

16. *Callimerus albus*, n. sp.

Elongate, parallel, black, almost entirely covered with white scales. Head so densely clothed with scales that the surface is entirely concealed. Eyes black, very conspicuous. Antennae and mouth parts pale testaceous. Thorax somewhat dilated at sides, entirely covered with scales. Elytra black, coarsely and sparsely punctured, at least where the punctures show. Entirely and very densely covered with snow white scales except for four small, roundish spots, two median lateral and two subapical. Tips of the elytra internally obliquely truncate, the outer angle mucronate. Under parts as usual, legs pale testaceous, posterior tibiae without subapical notch.

Length: 5.5 mm.

Male.—Terminal dorsal abdominal segment entire, somewhat dilated, fringed with rather long hairs. The median part is prolonged, perhaps, a slight distance beyond the lateral portions.

Female.—Unknown.

Type.—A male from Basilan, P. I., C. F. Baker (Baker No. 11,520).

17. *Callimerus flavus*, n. sp.

Elongate, parallel, piceous, clothed with yellowish scales. Head and thorax much as in the preceding species, but the thorax is more depressed along the median line. Elytra piceous, punctures coarse and moderately densely placed. Surface entirely covered with scales, the scales more dense in places so as to give the impression of two transverse bars, these situated

at basal and apical thirds. Tips of the elytra separately rounded, not mucronate. Underparts almost chestnut, lateral parts densely clothed with *white* scales. Legs pale testaceous, posterior tibiae without subapical notch.

Length: 6 mm.

Male.—Terminal segment (dorsal) entire, rounded, very slightly wider than the ventral, fringed with long hairs.

Female.—Terminal segments simple, unmodified.

Type.—A male from Mt. Banahao, Luzon, P. I., C. F. Baker (Baker No. 7278). Paratype: A female from the same locality (Baker No. 8290).

18. *Callimerus terminalis*, n. sp.

Elongate, parallel, depressed, slender. Entirely pale testaceous except for the tips of the elytra and the eyes, which are black. Head almost impunctate, shining, with a few white scales near the eyes. Thorax depressed above, very slightly dilated at sides, anterior construction obsolete, posterior deep, sharply defined. There are a few large, indistinct punctures scattered over the surface. Elytra long, parallel, coarsely and regularly punctured, testaceous except for the tips which are black and densely clothed with scales. There are also a few scales at the extreme base. Tips internally obliquely truncate, the outer angle mucronate. Under parts finely rugulose, with white scales along the sides. Legs testaceous, posterior tibiae without subapical notch.

Length: 6 mm.

Male.—Unknown.

Female.—Terminal segments simple, unmodified.

Type.—A female from Sandakan, North Borneo, C. F. Baker (Baker No. 11,463).